High Performance Work Systems: A Source of Competitive Advantage for Asian Firms?

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lobalization and technological developments present challenges to business firms to remain competitive. Such a situation has made human resource (HR) as a relatively important source of competitive advantage, compared to the more traditional sources such as product and process technology, protected or regulated markets, access to financial resources, and economies of scale (Pfeffer, 1995). Indeed, it is fairly common for firms to declare HR as its most important asset. Beyond mere rhetoric, however, theory has further explicated how HR is able to provide a source of competitive advantage for firms. Using Barney's (1991) resource-based view of organizations, a resource must be value adding, rare, inimitable, and non-substitutable in order to provide competitive advantage. HR, both in terms of the people who comprise the firm (i.e., employees) and the way that employees are managed (HRM), meets these criteria (Wright, McMahan & McWilliams. 1994). Additionally, HRM needs to be applied as a set of complementary practices that develops employee skills and motivation focused towards the attainment of the firm's goals and strategies. This approach to HRM has been termed High Performance Work Systems (HPWS) in the United States, where evidence of its economic impact on the firm has been accumulating (Becker & Huselid, 1998). This evidence will undoubtedly further encourage firms, not only in the United States, to adopt such an approach. Research in other countries has already been stimulated - Canada (Godard, 1991), Great Britain (e.g., Wood, 1995), New Zealand (Guthrie, 2001), and Singapore (Barnard & Rodgers, 2000). However, these studies have often merely adopted the conceptualization and operationalization used in the United States, and this may not be a valid assumption.

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The data set collected by an international consortium of researchers of best HRM practices (Teagarden et al., 1995) allows the comparative examination of HPWS within the context of the country being investigated. This paper analyzes data from the Philippines, Indonesia, the People's Republic of China, Chinese Taipei, and Japan, with the United States as a basis of comparison. Analysis by country shows that there are differences in the HRM practices utilized when HR is considered to be a critical success factor for the firm, and that the conceptualization of a set of interrelated practices may not necessarily be one where hiring, training, performance appraisal and compensation have to be all present and at the same level of utilization, or that high levels of utilization are necessarily associated with better organizational performance. Caution, therefore, must be taken by Asian firms in using HPWS, as conceptualized in the United States, as an effective means to meet competitive challenges. In addition, more research has to be conducted, both in the United States and elsewhere, to confirm the impact of HPWS on the organization's employees.

EXISTING LITERATURE ON HPWS

If HR were to be a source of competitive advantage for a firm, its best translation into practice is represented by the concept of HPWS, which views HRM as a set of complementary practices (internal fit) aligned with the firm's goals and strategies (external fit). Becker, Huselid, Pickus and Spratt (1997) coined the terms "Powerful Connections" and "Deadly Combinations" to underscore the need to ensure that HRM practices complement one another in order to deliver value rather than be "a recipe for disaster" (p. 43). In addition, it is argued that the synergistic effect of a set of complementary practices is greater than the sum of effects from individual practices. The criteria of rarity and inimitability are met because of the difficulty of implementing all practices at once that also is embedded in the firm's goals, strategies, history and culture (the external-fit element).

That a set of complementary practices — that is, HPWS — adds value has been empirically confirmed by the work of Huselid and colleagues in the United States. For example, Huselid's (1995) study of 968 publicly traded US firms estimated a gain of \$27,044 in sales per employee and \$18,641 in firm market value per employee from a one standard-deviation increase in HPWS. Subsequent conservative estimates of the same sample (but with data from two years) to take into account measurement errors placed the increase in firm market value between \$14,350-17,275 per employee (Huselid & Becker, 1996). Another set of 740 publicly traded US firms studied by Huselid and Becker (1995) estimated the gain in firm market value between \$38,000-73,000 per employee. These certainly are impressive figures that managers under pressure to remain competitive cannot ignore. Apart from these financial gains, various studies have also quantified results in terms of increased productivity and lowered employee turnover rates (Becker & Huselid, 1998).

Shortcomings in Existing Knowledge

Nonetheless, gaps in our existing knowledge have been pointed out (Becker & Huselid, 1998). Perhaps the most important aspect from the point of view of this conference is that of the impact of HPWS on the firm's employees. So far, most of the empirical research has focused on the benefits that the firm's shareholders are interested in. Certainly one can argue that if the organization does not remain financially viable, the employees also stand to lose. On the other hand, while firm competitive advantage does boil down to financial performance, as Becker and Huselid (1998) observed, "A HPWS is premised on the assumption that an organization's employees are more than a cost to be minimized, but rather a potential source of competitive advantage. ... Shareholders cannot appropriate all of the gains from this relationship without losing the cooperation of the employees. The gains to employees could take the form of both greater employment security and higher compensation and benefits." (p. 79). The question of whether financial performance conflicts with organizational outcomes that other stakeholders are interested in needs to be resolved by further empirical investigations.

Galang's (1999) study on unions and HPWS in 222 business firms in the United States perhaps is evidence of the impact on another stakeholder in organizations. In that study, union membership rate had a negative correlation with HPWS, supporting either suggestion that unions are hostile to the notion of HPWS and, therefore, block its introduction in the firm, or that HPWS is introduced within the firm as a union-avoidance or union substitution strategy. British scholars have in fact observed the phenomenon of the "bleak house" (Sisson, 1993) or "black hole" (Guest, 1995), organizations where neither HRM nor unions exist to advocate the protection of employees' interests.

Most of the evidence of impact on firm performance comes from cross-sectional studies that do not provide evidence of long-term effects, or of direction of causality. The reassessment of Huselid and Becker (1996) to incorporate data from two years also raises the question of the appropriate time lag when the benefits are realized. It may also be a matter of time when firms can no longer derive competitive advantage from HPWS because other firms are able to copy and successfully implement HPWS themselves. This is suggested by the study of Huselid, Jackson and Schuler (1997) that found that having technical HRM activities (that is, the more traditional functions in contrast to strategic HRM) did not provide competitive advantage for the large U.S. firms in their sample since the levels of technical HRM were generally higher across the firms than their strategic HRM, indicating that technical HRM activities had already been institutionalized in large U.S. firms.

Consistent with the concept, the empirical studies have utilized a single composite index as a measure of HPWS. Here too, however, questions are raised. The composite index that is more commonly used implies that more of anything is better, but hardly captures the central element of internal fit or of complementary practices.

Venkatraman (1989) recommended the use of cluster analysis as a more appropriate test. Cluster analysis has been used successfully by Arthur (1992, 1994), and Becker and Huselid (1998) in the United States.

The external-fit element of HPWS has not fared as well in terms of empirical validation. Results are either weak or inconsistent, and not many empirical studies have been conducted that incorporates other factors that might affect the impact of HPWS on organizational performance (Becker & Huselid, 1998; Dyer & Reeves, 1995). Yet, context might play an important role in what can provide the firm with competitive advantage. As Huselid et al. (1997) suggested, their findings with respect to technical HRM vs. strategic HRM, "may not generalize, however, to small U.S. firms and to firms competing in environments characterized by lower levels of institutionalization for technical HRM activities, such as large firms in other countries and global firms whose human resource practices have been shaped by the institutional environment of another country" (p.184).

Non-U.S. Studies

Godard (1991) examined the application of what was termed "progressive HRM paradigm" in unionized Canadian firms. The progressive paradigm was then recently being espoused in the U.S. as a new, more cooperative, problem-solving labor-management relations model that is more responsive to the current business environment. contrast to the traditional adversarial, job control model prevalent in both U.S. and Canadian industrial relations systems, the progressive paradigm "meant to include both more traditional 'welfare capitalist'/ human relations practices and more recent 'participation/job enrichment' schemes variously associated with 'QWL', 'socio-technical systems', and 'quality circles'." (p.379). Godard provided both theoretical arguments and empirical evidence with respect to the limited adoption and effectiveness of the progressive paradigm. Theoretically, two reasons were advanced: first, the underlying conflictual nature of labour-management relations; and, second, the structural context which determines whether the adoption of the progressive paradigm maximizes profit and, thus, is the rational choice of management. The empirical evidence collected by Godard supported the second argument: "results suggest that progressive practices are more likely to be profit rational for large employers with large establishments and capital intense, process technologies, and that, as such, they are more likely to be adopted" (p. 393). The evidence also showed that while the paradigm did make a difference in terms of some labor relations climate variables (perceived hostility in worker-supervisory relations, grievance rate, and absenteeism rate), that difference was small. No difference was found in terms of days lost to strike activity, quit rates and number of wildcat strikes.

Wood's (1995) study determined whether the notions ofinternal fit and external fit of HRM practices also existed in Great Britain. From the theoretical and empirical literature that was then accumulat-ing in the United States, Wood listed several HRM practices that have been suggested as being part of a set practices that are used together "to reflect an underlying commitment on the part of employers to their employees which is rooted in a conception of them as assets or resources and not simply as a disposable factor of production" (p.52). Data gathered from 135 manufacturing plants confirmed both internal fit and external fit notions. However, latent variable analysis indicated three practices had to be eliminated from the set termed high commitment management (HCM), namely, merit pay, profit sharing and permanent employment guarantee, practices which Pfeffer (1995) had proposed to utilize HR as a source of competitive advantage. Wood's (1996) paper examining pay systems most compatible with HCM also support the elimination of merit pay and profit sharing, stating that "the type of HCM being practised in the UK need not necessarily be accompanied by particular pay systems, or that there are two aspects of HCM, i.e., employee involvement and financial involvement which could be treated as two independent aspects of commitment management' (p. 64). Wood and Albanese (1995) also concluded that the use of HCM in British manufacturing was limited in that only a few of the firms in their sample had high levels of HCM.

Wood (1995) and Wood and Albanese (1995) also found no relationship between unionization and overall level of HCM in the two years for which they had data. Wood and Albanese (1995) suggested that "Though the results of this study may partly be a reflection of the relatively low number of plants using high levels of HCM, it may well be that there is a threshold effect such that past a certain level of HCM, the use of collective bargaining begins to conflict with other elements of management's approach to labour" (p. 242). They did find, however, that "The rate of change of HCM ... is likely to be slower in unionized plants and faster in foreign-owned ones. Since neither is related to the level of HCM in 1990 and 1986, this suggests that the rate of diffusion of HCM may be slower in unionized and British plants but its eventual spread is not" (pp. 239-241).

A more encompassing sample of firms in the United Kingdom studied by Wood and de Menezes (1998) showed that contrary to previous studies in the United Kingdom, medium and high levels of HCM were more prevalent, but, consistent with other research finding a lack of strong relationship with unionization, low levels were not necessarily associated with non-union. This time however, latent variable analysis showed that HCM could not be regarded as a continuous variable, but rather, as a categorical one. Latent class analysis of the data identified four different groups of HCM, differentiated by performance appraisal practices at the top end (high HCM), and direct communication at the bottom end (low HCM). The middle two types were considered

as medium HCM, with some practices at a high level. The four different groups however were all high in terms of skill formation.

Wood and de Menezes (1998) measured the effect of HCM on organizational performance, in terms of productivity level, productivity change, overall financial performance, employee relations climate, iob creation, labor turnover and absenteeism, with the first four as one-item perceptual measures. Their analysis showed that there did not seem to be any difference between high HCM and low HCM in terms of job creation and overall financial performance, although they were significantly better than the medium groups. Both medium groups, however, had significantly lower levels of absenteeism than the high HCM group. Noting that these results were contrary to the findings in the United States, Wood and de Menezes pointed out that the differences in the variables, the measures used, the analysis conducted, and the level of the organizations used (corporate vs. establishment) make it difficult to conclude that there are indeed differences between the United States and the United Kingdom. In addition, they also indicated that concluding that HCM delivers little or no benefit to organizations in the United Kingdom cannot be made at this time because of other possible explanations for their findings: 1) if contingency theory is right that the effect of HCM on performance is strong only in unstable environment, then the findings are confounded because the sample may include high performers in stable environments; 2) there are other aspects of organizational performance that are more relevant to HCM which they may not have been measured, including those that are more intermediate, particularly in the short-run; and 3) the omission of job security guarantees and job design principles may have affected the results, particularly when mutual commitment is a critical component for HCM to have a positive impact for the organization. The survey used to collect the data which Wood and de Menezes (1998) analyzed, did not include such items.

Barnard and Rodgers (2000) examined whether the concept of a coherent HRM system existed in Singapore, which HRM practices are included, and to what extent such an HRM system related to flexible work practices that are designed to lead to high performance (e.g., teambased operations, quality control circles, self-direction, employee involvement, multilateral communication). Starting from the internal labor market and mutual commitment theory and research, they identified several practices that related to the internal cultivation of human resources, as they argue that these internally oriented practices would be necessary for the implementation of those flexible work practices (which they have termed HPWS). Factor analysis showed that the HRM practices they have identified do not reflect a single underlying construct of internal orientation, but that there were three distinct factors: staffing, employment stability, and employee development, and it is only the latter factor that is related to the flexible work practices. One important lesson from the study of Barnard and Rodgers is the role of the

Singaporean regulatory context has on management decisions with respect to these practices, stating that "...employers in Singapore may be less willing than employers in other countries to adopt HRM practices relating to internal staffing or the promotion of employment stability, while employees in Singapore may also find such practices less desirable" (p.1039).

Economic reforms, including regulatory changes in the industrial relations system, in New Zealand opened the doors to more innovative management practices (Guthrie, 2001). Thus, Guthrie investigated whether the concept of HPWS translates as well in New Zealand, and meets the employers' needs for competitiveness. Borrowing largely from U.S. prescriptions, and particularly the empirical studies of Arthur (1992, 1994) and Huselid (1995), Guthrie (2001) constructed a High Involvement Work Practices (HIWP) index comprising twelve HRM practices. Only the utilization of formal dispute resolutions mechanisms suggested in the U.S. studies was not included since these mechanisms are required by law for all employers in New Zealand. The HIWP index was then correlated with 1) the relative importance of the HR function, measured by a five-point scale (r=.40, p<.001), and 2) a 7-item HR Strategy scale measuring the role of HR in the firm's competitive strategy (r=.38, p<.001). The main objective of Guthrie's study however was not to confirm what that set of practices consisted of in New Zealand, but rather on the interactive effect of employee turnover and the use of HIWP on labour productivity, in line with Arthur's (1994) findings in U.S. steel minimills. In both Guthrie (2001) and Arthur (1994), employee turnover was not regarded as an organizational outcome that was necessarily affected by the HRM system, unlike Huselid's (1995) work, for instance, but as a factor that moderated the impact of the HRM system on organizational outcomes.

Similar to Huselid's studies in the United States, Guthrie (2001) also estimated the gain in employee productivity from increasing the use of HIWP from one standard deviation below the sample mean to one standard deviation above at around \$70,000 in sales per employee. He also quantified the moderating effect of employee turnover: an increase in employee retention from one standard deviation below the sample mean to one standard deviation above the sample mean translates into an increase in per employee productivity of about \$43,500 for firms utilizing high HIWP (defined as one standard deviation above the mean). For firms with low HIWP (one standard deviation below the sample mean), a similar increase in employee retention however is associated with a decrease in productivity of \$25,600. With HIWP, firms become more dependent on their employees that employee turnover has a greater impact.

The concept of HPWS, that of a set of complementary practices that can provide the firm with competitive advantage, has generated much interest both among business managers and researchers outside of the United States. Some of the research has tested the concept

itself and found that the set of complementary practices need not be the same (e.g., Wood, 1995; Barnard & Rodgers, 2000). Some have also found that having a complementary set of HRM practices did not necessarily lead to organizational outcomes that will enable the firm to meet needs for competitiveness (Wood & de Menezes, 1998). It must be noted that the analysis of Wood and de Menezes used data from a survey that was constructed by individuals from their country itself and one can assume that it reflects the relevant country differences. Guthrie's (2001) study in New Zealand confirms the positive gains to organizations that U.S. studies have found, but while he correlated the set of HRM practices with whether HR was considered important and has a role in the competitive strategy of the firms, he tested the overall single index, but not whether each of the HRM practices within the set were consistently related to the important role of HR in competitive strategy. In terms of organizational outcomes from the perspective of a different stakeholder, Godard's (1991) study showed limited or no effect on indicators of labor relations climate. Since his study was only of unionized firms, it was difficult to tell whether the existence of a union was affected; but in Great Britain, Wood and Albanese (1995), and Wood and de Menezes (1998) confirm that unionization did not seem to matter in terms of overall level of utilization, but suggest that it might have an impact on the rate of diffusion. Taken together, these studies suggest that one must be cautious when transferring the concept, but because they focused only on a single country at a time, it is very difficult to make comparisons as the observed differences may be attributed to factors other than country differences. As indicated earlier, a global consortium has collected data on the use of various HRM practices in different countries. Utilizing the same data-gathering instrument enables comparison across countries.

THE "BEST PRACTICES" CONSORTIUM

In 1991, a consortium of researchers from various institutions around the world was created to address the following questions (Teagarden et al., 1995; Von Glinow, 1993): (1) Which HRM practices are most used currently? How effective are these practices? (2) Which practices are related to organizational effectiveness and to employee-job satisfaction? (3) Are there universal best HRM practices or only situation-specific best practices? (4) Does HRM effectiveness vary with business strategy, national culture or subculture, or a firm's external environment? One of its driving forces is to provide guidance to business decision-makers in an increasingly global world, in terms of the best way to manage human resources that would benefit both the organization and its members (i.e., employees), given various contextual characteristics (e.g., societal or national culture). In other words, how prevalent is the use of the practice in other countries, and does its use lead to the same results? Such basic information will eventually lead

to identifying the factors that account for differences and similarities. The current state of research and theory is not able to provide adequate answers on the question of transferability (Teagarden & Von Glinow, 1997).

The consortium arrangement addresses the typical difficulties encountered in international management research, namely, resource and access constraints, and cross-cultural methodological challenges. Data collection using a standardized questionnaire is personally funded and done by each member, but by pooling together these various country data sets, all members have access to data that one may not have otherwise. In addition, because members also either come from or have substantial exposure to and understanding of the country being surveyed, ethnocentric bias that has plagued much of international research is reduced. Each member is able to reformulate and appropriately translate the questions so as to achieve conceptual equivalence.

METHODOLOGY

Analysis of the consortium's data'set was done at the country level. A scale of the use of human resources as a critical factor contributing to the success of the respondent's firm was constructed from five items (unique corporate culture, effective management of human resources, a management philosophy that values employees, superior managers, and superior employees). This scale was named HRCritical. Internal reliabilities of the HRCritical scale across all country samples ranged from a Cronbach alpha of .73 to .84. Respondents (managers) were asked to rate the degree their company considered each item to be critical to their company's success, using the following scale: 1=Not at all; 2=To a small extent; 3=To a moderate extent; 4=To a large extent; 5=To a very great extent. To determine how this recognition of HR's value for firm success translates into HRM practice, the average score for HRCritical was correlated with different practices in hiring, training, performance appraisal and pay. Average scores for the significantly correlated hiring, training, performance appraisal and pay practices were then computed, and this served as the four characteristics for cluster analysis, which Venkatraman (1989) recommended as a measure of internal fit. To differentiate between high and low HPWS, a two-cluster solution was attempted for each country. Once the sample for the country had been clustered, a t-test was conducted to determine whether the means for hiring, training, performance appraisal and pay between the two clusters were different.

Further, whether clusters differed in terms of organizational performance was also determined by t-test. Organizational performance was measured using ten items on a five-point scale, with only the extreme ends anchored as "Very false" for 1 and "Very true" for 5. Using this scale, respondents were asked how accurately each of these items described their respective companies: produces high quality goods,

has promising future, manages its people well, flexible enough to change, high quality people, strong unified culture, very effective overall, very satisfied workforce, very productive workforce, and seen as leader in industry. The organizational performance scale had high internal reliabilities across all countries, ranging from a Cronbach alpha of .83 to .94.

Information was also available with regards to whether or not there were employees belonging to a union(s) in the company. Analysis was, therefore, conducted on whether or not the two clusters differed in terms of unionization.

RESULTS

Relevant HRM Practices

Table 1 shows the country differences in the HRM practices that are correlated with HRCritical. Indonesia and the People's Republic of China, followed by the Philippines, have more HRM practices that significantly correlated with HRCritical than the United States, the origin of the HPWS concept and many of the HRM practices listed. In some areas, such as in Training and Performance Appraisal, all the listed practices are significantly correlated with HRCritical for these three countries. For Chinese Taipei, none of the Compensation practices significantly correlated, and only one Performance Appraisal practice was; for Japan, only one Compensation practice was significantly correlated with HRCritical. Overall, Chinese Taipei and Japan have less number of correlated HRM practices than the U.S. sample.

Cluster Analysis: High vs Low HPWS

Table 2 shows the results of the cluster analysis done for each country. The highlights of the results are listed below. The "High" or "Low" label was used when most, if not all, of the HRM areas had higher or lower means.

- In most countries, except the Philippines and Japan, the number of organizations in the High cluster was lower than the Low cluster; for the Philippines and Japan, this was the opposite.
- 2. Only in three countries, namely Indonesia, Philippines, and the People's Republic of China, did the two-cluster analysis result in differentiating the High vs. Low across all four areas of HRM. For the other three countries, in at least one area of HRM did the two clusters not differ significantly. For Chinese Taipei, Training and Performance Appraisal did not differ significantly between the High and Low clusters, with Performance Appraisal in the opposite direction expected. For the United States, Performance Appraisal did not differ significantly, but the means were in the direction expected. For Japan, Performance Appraisal and Compensation did not differ significantly.

Table 1. HRM practices correlated with HRCritical

		USA	Ind	Phi	PRC	Tai	Jpn
	HRCritical (Mean)	3.79	3.45	3.94	3.54	4.31	3.86
	Practice	r	r	r	r	r	r
	Ability to perform technical job requirements	.35**	.28**	.11	.36**	.14	.04
	Personal interview	.07	.26**	.03	.16*	.12	.17**
	Ability to get along well with others	.26*	.24**	.08	.26**	.17*	.12*
	Right connections	.01	08	01	.07	.20*	.14*
Hiring	Belief that person will stay with company	.05	.27**	.16*	.21**	.17*	.11*
Ī	Employment test	03	.24**	.03	.29**	.14	00
	Proven work experience in similar job	.29**	.13*	01	.29**	.06	.08
	Potential to do a good job	.01	.18**	.09	.29**	.25**	.14*
	Fit with company's values & ways	.28**	.28**	.22**	.21**	.17*	.10
	Future co-workers' opinions	.28**	.03	.01	.19**	.09	.10
	Number of significantly correlated practices	5	8	2	9	5	5
	Provide reward to employees	14	.36**	.20*	.17*	.22**	.07
	Improve technical job abilities	.15	.46**	.25**	.31**	.00	.03
	Improve interpersonal abilities	.23*	.33**	.22**	.31**	.17*	.10
	Remedy past poor performance	08	.38**	.25**	.21**	02	.03
guir	Prepare employees for future job assignment	.34**	.43**	.21**	.19**	.16*	.07
Training	Build teamwork within company	.50**	.38**	.32**	.21**	.22*	.06
	New employees	.16	.33**	.29**	.25**	.15	.21**
	Help employees understand the business	.28**	.45**	.26**	.27**	.08	.12*
	Provide skills needed to do a number of different jobs	.24*	.44**	.26**	.36**	.17*	.13*
	Teach employees about company's values	.30**	.45**	.41**	.39**	.10	.03
	Number of significantly correlated practices	6	10	10	10	- 5	3

		USA	Ind	Phi	PRC	Tai	Jpn
	HRCritical (Mean)	3.79	3.45	3.94	3.54	4.31	-3.86
Performance Appraisal	Practice	r	r	r	r	r-	r
	Determine appropriate pay	.11	.36**	.19*	.29**	.07_	.04
	Document subordinate's performance	.05	.43**	.41**	.30**	.12	.15**
	Plan development activities	.34**	.43**	.35**	.41**	.03	.09
	Salary administration	012	.35**	.18*	.30**	.10	.08
	Recognition for things done well	.10	.41**	.31**	.34**	.08	.19**
ce Ap	Lay our specific ways to improve performance	.24*	.48**	.32**	.35**	.07	.14*
a	Discuss subordinate's views	.08	.45**	.28**	.35**	.07	.08
form	Evaluate subordinate's goal achievement	.21*	.39**	.30**	.40**	.09	.16**
Per	Identify subordinate's strengths/weaknesses	.22*	.40**	.35**	.35**	.06	.06
	Allow subordinate to express feelings	.00	.41**	.29**	.42**	.09	.20**
,	Determine subordinate's promotability	.20*	.42**	.26**	.31**	20*	.05
	Number of significantly correlated practices	5	11	11	11	1	5
	Pay incentives are important part of compensation strategy	.20*	.25**	.08	.29**	02	.11*
	Benefits are important part of total pay package	.11	.36**	.28**	.21**	.04	.08
	Portion of employee's earnings contingent on performance	.06	.17**	.19*	.23**	01	.00
Compensation	Long-term results more important than short-term results	.33**	.29**	.26**	.36**	00	.01
npen	Seniority does NOT enter into pay decisions	03	.11*	.08	.11	03	07
S	Incentives significant amount of employee's total earnings	.12	.27**	.12	.15*	.05	.00
	Employee benefits package is very generous	04	.23**	.32**	.28**	.11	.02
	Pay system has a futuristic orientation	.10	.36**	.27**	.29**	02	03
	Pay raises determined mainly by employee's job performance	.29**	.28**	.19*	.32**	.01	.09
	Number of significantly correlated practices	3	9	6	8	0	1
	Total number of significantly correlated practices	19	38	29	38	11	14

Note: Ind - Indonesia, Phi - Philippines, PRC - People's Republic of China, Tai - Chinese Taipei, and Jpn - Japan

3. In general, organizational performance differed between the High and Low clusters in Indonesia, United States, and People's Republic of China in the direction expected, that is, where the means of the HR practices were generally high, organizational performance was also high. For the Philippine and Japanese sample, however, there was no difference in organizational performance between the two clusters, although direction was as expected for both countries. For Chinese Taipei, the High and Low clusters differed significantly in terms of organizational performance, but the direction is opposite to what was expected.

In terms of unionization, chi-square analysis shows that the High and Low clusters were not significantly different in the United States, Philippines, People's Republic of China, and Chinese Taipei. In Indonesia, it was more likely for High cluster organizations to be non-union, but it was equally likely that organizations in the Low cluster be non-union or union. In Japan, it was more likely for the Low cluster to be non-union and the High Cluster to be union.

Table 2.- Means of each cluster

		U	USA		Ind		Phi		PRC		Tai		Jpn	
Clusters		1	2	1	2	1	2	1	2	1	2	1	2	
	N	30	100	23	174	113	37	17	149	19	92	242	2	
HRCritical		4.2	3.6	4.2	3.5	4.0	3.7	4.4	3.5	4.2	4.3	3.8	4.8	
HR		4.0	3.2	4.0	3.2	3.7	2.6	3.8	3.0	3.8	3.5	3.1	1.4	
		3.7	2.4	4.0	2.8	3.5	2.4	4.0	2.8	3.7	3.4	3.2	1.0	
		4.4	4.2	4.1	2.9	3.6	2.4	4.3	2.8	4.0	4.1	3.1	2.2	
	Compensation	3.1	2.2	3.8	2.7	3.4	2.5	4.2	2.9	n.a.	n.a.	3.1	4.5	
Organizational Performance		4.0	3.5	4.1	3.3	3.8	3.2	4.6	3.3	3.0	3.7	3.2	2.4	

Note:

- Ind Indonesia, Phi Philippines, PRC People's Republic of China, Tai -Chinese Taipei, and Jpn - Japan
- 2. n.a. None of the practices significantly correlated with HRCritical.
- 3. Shaded cells indicate means between clusters 1 and 2 were significantly different. t-values are available from the author.

DISCUSSION

While the notion of a set of complementary HRM practices (internal fit) that is associated with utilizing HR as a source of competitive advantage for the firm is confirmed in the different countries, the present study shows that the practices that comprise this set are not the same across the different countries. Furthermore, the standard four areas of

HRM, namely hiring, training, performance appraisal and compensation, need not be part of this set as well, nor that they all need to be at a high level. Its effects on the organization also differ across countries; in some countries, there may not be any difference, while in others, it may not be entirely positive. It should be noted, however, that the indicator of organizational performance used here is a subjective measure relying on the perceptions of one respondent. More objective measures such as those used by Huselid (1995) and Guthrie (2001) should be used, including gathering perceptions from several organizational members and measuring other effects, particularly those that touch on the interests of other stakeholders especially employees, but only in conjunction with the set of HRM practices that has been defined by the country being examined. It would be interesting to find evidence on whether the effect of HPWS on productivity and financial performance is moderated by the benefits gained by employees, and whether such findings can generalize to other countries. That would certainly help resolve some of the criticisms raised against management initiatives to introduce innovations at the workplace. Other firm-level factors that affect both the utilization of HPWS, and those that directly influence organizational outcomes should be incorporated in future research, to determine whether in fact HPWS leads to better organizational performance, or only under certain circumstances. That would help resolve some of the more pragmatic concerns with regards to investing in HPWS or not.

The question that these results raise is why there are such differences across countries? Information from the "Best Practices" consortium is limited so that this question can be explored by this study. However, clearly indicated by the non-U.S. studies is the important role of the regulatory environment in the country, as well as the expectations and perceptions of both management and employees with regards to preferable and effective practices. Future research should incorporate information with regards to the specific country differences to iden-

tify which aspects are relevant.

Finally, countries concerned with national competitive advantage should also heed Porter's (1998) model that includes firm strategy, structure and rivalry as only one component, together with factor endowments, related and supporting industries, and demand conditions.

REFERENCES

- Arthur, J.B. 1992. 'The link between business strategy and industrial relations systems in American steel minimills', *Industrial and Labor Relations Review*, vol. 45, no. 3, pp. 488-506.
- Arthur, J.B. 1994. 'Effects of human resource systems on manufacturing performance and turnover', Academy of Management Journal, vol. 37, no. 3, pp. 670-687.
- Barnard, M.E. & Rodgers, R.A. 2000. 'How are internally oriented HRM policies related to high-performance work practices? Evidence from Singapore', The International Journal of Human Resource Management, vol. 11, no. 6, pp. 1017-1046.
- Barney, J.B. 1991. 'Firm resources and sustained competitive advantage', Journal of Management, vol. 17, no. 1, pp. 99-120.
- Becker, B.E. & Huselid, M.A. 1998. 'High performance work systems and firm performance: A synthesis of research and managerial implications' in Research in Personnel and Human Resources Management (Vol. 16), ed. G.R. Ferris, JAI Press, Greenwich.
- Becker, B.E., Huselid, M.A., Pickus, P.S., & Spratt, M.F. 1997. 'HR as a source of shareholder value: Research and recommendations', *Human Resource Management*, vol. 36, no. 1, pp. 39-47.
- Dyer, L. & Reeves, T. 1995. 'HR strategies and firm performance: What do we know and where do we need to go', *The International Journal of Human Resource Management*, vol. 6, no. 3, pp. 656-670.
- Galang, M.C. 1999. 'Stakeholders in high-performance work systems', The International Journal of Human Resources Management, vol. 10, no. 2, pp. 287-305.
- Godard, J. 1991. 'The progressive HRM paradigm: A theoretical and empirical re-examination', Relations Industrielles, vol. 46, no. 2, pp. 378-399.
- Guest, D.E. 1995. 'Human resource management, trade unions and industrial relations', in *Human Resource Management: A Critical Text*, ed. J. Storey, Routledge, London.
- Guthrie, J.P. 2001. 'High involvement work practices, turnover and productivity: Evidence from New Zealand', Academy of Management Journal, vol. 44, no. 1, pp. 180-190.
- Huselid, M.A. 1995. 'The impact of human resource management practices on turnover, productivity, and corporate financial performance, *Academy of Management Journal*, vol. 38, no. 3, pp. 635-672.
- Huselid, M.A. & Becker, B.E. 1995. 'The strategic impact of high performance work systems', Academy of Management Annual Meeting, Vancouver, BC, Canada.
- Huselid, M.A. & Becker, B.E. 1996. 'Methodological issues in cross-sectional and panel estimates of the human resource-firm performance link', Industrial Relations, vol. 35, no. 3, pp. 400-422.

- Huselid, M.A., Jackson, S.E., & Schuler, R.S. 1997. 'Technical and strategic human resource management effectiveness as determinants of firm performance', Academy of management Journal, vol. 40, no. 1, pp. 171-188.
- Pfeffer, J. 1995. Competitive advantage through people, Harvard Business School Press, Boston.
- Porter, M. 1998. Competitive advantage of nations, Free Press, New York.
- Sisson, K. 1993. 'In search of HRM?', British Journal of Industrial Relations, vol. 31, no. 2, pp.201-210.
- Teagarden, M.B. & Von Glinow, M.A. 1997. 'Human resource management in cross-cultural contexts: Emic practices versus etic philosophies', *Management International Review*, vol. 37, no. 1, pp. 7-20.
- Teagarden, M.B., Von Glinow, M.A., et. al., 1995. 'Towards a theory of comparative management research: An idiographic case study of the best international human resources management project', Academy of Management Journal, vol. 38, no. 5, pp.1261-1287.
- Venkatraman, N. 1989. 'The concept of fit in strategy research: Toward verbal and statistical correspondence', *Academy of Management Review*, vol. 14, no. 3, pp. 423-444.
- Von Glinow, M.A. 1993. 'Diagnosing "best practice" in human resources management principles' in *Research in Personnel and Human Resources* (Supplement 3), ed. B. Shaw, P. Kirkbride, G. Ferris & K. Rowland, JAI Press, Greenwich.
- Wood, S. 1995. 'The four pillars of HRM: Are they connected?', *Human Resource Management Journal*, vol. 5, no. 5, pp. 49-59.
- Wood, S. 1996. 'High commitment management and payment systems', *Journal of Management Studies*, vol. 33, no. 1, pp. 53-77.
- Wood, S. & Albanese, M.T. 1995. 'Can we speak of a high commitment management on the shop floor?' *Journal of Management Studies*, vol. 32, no. 2, pp. 215-247.
- Wood, S. & de Menezes, L. 1998. 'High commitment management in the U.K.: Evidence from the Workplace Industrial Relations Survey, and Employers' Manpower and Skills Practices Survey', Human Relations, vol. 51, no. 4, pp. 485-515.
- Wright, P.M., McMahan, G.C. & McWilliams, A. 1994. 'Human resources and sustained competitive advantage: A resource-based perspective', *The International Journal of Human Resource Management*, vol. 5, no. 2, pp. 301-326.